

IN THE CLAIMS:

Please amend the claims as follows:

WHAT IS CLAIMED IS:

1. (Currently Amended) A semiconductor circuit, comprising:
three or more nodes at least including one input node and one output node;
plural paths connected between said three or more nodes and whose signal propagation directions between the nodes are regulated;
a signal propagation time ~~regulator~~ delay circuits for ~~regulating~~ establishing
a signal propagation delay time of for each of said paths;
an input unit coupled to said one input node for inputting ~~a predetermined~~
an input signal to the input node; and
a detector coupled to said input node for ~~detecting~~ determining a time
required for the input signal to propagate through said paths and arrive at the
output node.
2. (Currently Amended) The semiconductor circuit according to claim 1,
wherein said node comprises a storage ~~units~~ unit for, when there are plural signals
inputted to said node via paths connected to said node itself, specifying and
storing a path of a signal which arrives first or last out of the signals inputted via
the paths connected to said node itself.
3. (Original) The semiconductor circuit according to claim 2, wherein
when three signals are inputted to said node via three paths, said storage unit of
said node comprises three three-input negative logical product circuits to each of
which one each of the three signals inputted via the three paths is inputted, and
further inputted to said each of the negative logical product circuits are outputs of
the other two negative logical product circuits.

4. (Currently Amended) The semiconductor circuit according to claim 2, wherein said signal propagation time ~~regulator~~ delay circuits for at least one path out of said plural paths changes the signal propagation time according to a degree of coincidence or a degree of similarity between two signals to be subjected to matching.

5. (Original) The semiconductor circuit according to claim 4, wherein said nodes are arranged in a two-dimensional lattice shape.

6. (Currently Amended) The semiconductor circuit according to claim 5, wherein by ~~detecting~~ determining the degree of coincidence or the degree of similarity between the two signals to be subjected to matching according to the ~~detected~~ determined time required to arrive at the output node and specifying a path stored in said storage unit, said detector ~~detects~~ determines a shortest path or a longest path corresponding to the degree of coincidence or the degree of similarity to perform dynamic programming matching.

7. (Original) The semiconductor circuit according to claim 6, wherein when three signals are inputted to said node via three paths, said storage unit of said node comprises three three-input negative logical product circuits to each of which one each of the three signals inputted via the three paths is inputted, and further inputted to said each of the negative logical product circuits are outputs of the other two negative logical product circuits.

8. (Currently Amended) The semiconductor circuit according to claim 1, wherein said signal propagation time ~~regulator~~ delay circuits for at least one path out of said plural paths changes the signal propagation time according to a degree of coincidence or a degree of similarity between two signals to be subjected to matching.

9. (Original) The semiconductor circuit according to claim 1, wherein said nodes are arranged in a two-dimensional lattice shape.

10. (Currently Amended) The semiconductor circuit according to claim 2, wherein by ~~detecting~~ determining a degree of coincidence or a degree of similarity between two signals to be subjected to matching according to the ~~detected~~ determined time required to arrive at the output node and specifying a path stored in said storage, said detector ~~detects~~ determines a shortest path or a longest path corresponding to the degree of coincidence or the degree of similarity to perform dynamic programming matching.

11. (Original) The semiconductor circuit according to claim 6, further comprising a converter for converting element values of the two signals to be subjected to matching to pulses having pulse positions according to the element values.

12. (Canceled)

13. (Currently Amended) The semiconductor circuit according to claim 42 6, wherein said delay circuit comprises an even number of inverters.

14. (Currently Amended) The semiconductor circuit according to claim 42 13, wherein said delay circuit is a variable delay circuit.

15. (Original) The semiconductor circuit according to claim 6, wherein the two signals to be subjected to matching are character data.

16. (Original) The semiconductor circuit according to claim 6, wherein the two signals to be subjected to matching are voice data.

17. (Original) The semiconductor circuit according to claim 6, wherein the two signals to be subjected to matching are image data.